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748 ABSTRACT

Highly transparent alumina hydrate particles having a large pore volume, having a pore diameter which falls in a specified range and, when formed into a high-concentration dispersion sol, exhibiting a low viscosity are provided. Alumina hydrate particles having a composition represented by the general formula x $\rm M_2O$ · y $(\rm NH_4)_2O$ · $\rm Al_2O_3$ · z $\rm H_2O$ $(2 \times 10^{-4} \le x \le 25 \times 10^{-4}, 0.1 \times 10^{-4} \le y \le 20 \times 10^{-4}, 0.6$ \leq z \leq 2.5, M represents an alkali metal; when the alkali metal is in the form of M_2O , x is the number of moles thereof per mol of Al₂O₃; when ammonia is in the form of (NH₄)₂O, y is the number of moles thereof per mol of Al_2O_3 ; and z is the number of moles of hydration water (H2O) per mol of Al₂O₃), the alumina hydrate particles having an average particle diameter of 0.02 to 0.2 μm , a total pore volume of 0.5 to 1.5 ml/g, and a volume of pores whose diameter is from 15 to 30 nm ranging from 0.3 to 1.0 ml/g.